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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/651,097 | 08/28/2003 | Eun Seong Seo | 2080-3-179 | 7715 |

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT PAPER NUMBER

2851

DATE MAILED: 03/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|-------------------------------|----------------------------|--|
| Office Action Summary | Application No. 10/651,097 | Applicant(s) SEO ET AL. | |
| | Examiner Rochelle Blackman | Art Unit 2851 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Specification

The disclosure is objected to because of the following informalities: On pg. 6, paragraph [33], 1st line, "rear mirror 12" should - -rear mirror 2- -.

Appropriate correction is required.

Claim Objections

Claims 1 and 12 are objected to because of the following informalities: On line 3 of claims 1 and 12, "reenlarging" should be "re-enlarging". Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1 and 3-19 are rejected under 35 U.S.C. 102(b) as being anticipated by Monson et al., U.S. Patent No. 6,388,810.

Regarding claims 1 and 3-11, Monson discloses a "projection system"(see FIGS. 1-4) comprising: a "projection lens for enlarging and projecting an image"(see 11 of FIGS. 1-4); an "optical element for reenlarging an enlarged image through the projection

Art Unit: 2851

lens, and reflecting the image on a predetermined position”(see 12 of FIGS. 1-4); and a “rear mirror for displaying an reflected image through the optical element on a screen”(for “rear mirror”, see 14, 25, and 30 and for “screen”, see 16 of FIGS. 1-4); “wherein the optical element is a non-spherical mirror”, “wherein the optical element is disposed at an upper portion of the projection lens”, “wherein the optical element is disposed at an upper portion between the rear mirror and the screen”, (see “optical element” 12 in FIGS. 1-4); and “wherein the rear mirror is tilted at an angle of 90-130 degrees from a horizontal line”, “wherein the rear mirror is tilted at an angle of 90-110 degrees from a horizontal line”, “wherein a tilt-angle difference between the rear mirror and the screen ranges 0-40 degrees”, “wherein the rear mirror is a planar mirror”, “wherein the rear mirror is a spherical mirror”, and “wherein the rear mirror is a non-spherical mirror”(see “rear mirror” see 14, 25, and 30 and “screen” 16 in FIGS. 1-4)

Regarding claims 12-19, Monson discloses a “projection system”(see FIGS. 1-4) comprising: a “projection lens for enlarging and projecting an image”(see 11 of FIGS. 1-4); an “optical element formed of a non-spherical mirror, reenlarging an enlarged image through the projection lens, and reflecting the image on a predetermined position”(see 12 of FIGS. 1-4); and a “rear mirror for displaying an reflected image through the optical element on a screen, the rear mirror being tilted at an angle of 90-130 degrees from a horizontal line”(for “rear mirror”, see 14, 25, and 30 and for “screen”, see 16 of FIGS. 1-4); “wherein the optical element is disposed at an upper portion of the projection lens” and “wherein the optical element is disposed at an upper portion between the rear mirror and the screen”(see “optical element” 12 in FIGS. 1-4); and “wherein the rear

mirror is tilted at an angle of 90-110 degrees from a horizontal line", "wherein a tilt-angle difference between the rear mirror and the screen ranges 0-40 degrees", "wherein the rear mirror is a planar mirror", "wherein the rear mirror is a spherical mirror", and "wherein the rear mirror is a non-spherical mirror"(see "rear mirror" 14, 25, and 30 and "screen" 16 in FIG. 1-4).

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 2 and 4-8, and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Westort et al., U.S. Patent No. 6,650,470.

Westort discloses a "projection system"(see FIG. 1) comprising: a "projection lens for enlarging and projecting an image"(see 1 of FIG. 1); an "optical element for reenlarging an enlarged image through the projection lens, and reflecting the image on a predetermined position"(see 4 of FIG. 1); and a "rear mirror for displaying an reflected image through the optical element on a screen"(for "rear mirror", see 3 and for "screen", see 8 of FIG. 1); "wherein the optical element is a spherical mirror", "wherein the optical element is disposed at an upper portion of the projection lens", and "wherein the optical element is disposed at an upper portion between the rear mirror and the screen" (see "optical element" 4 in FIG. 1); "wherein the rear mirror is tilted at an angle of 90-130

degrees from a horizontal line", "wherein the rear mirror is tilted at an angle of 90-110 degrees from a horizontal line", "wherein a tilt-angle difference between the rear mirror and the screen ranges 0-40 degrees", and "wherein the rear mirror is a spherical mirror"(see "rear mirror" 3 in FIG. 1).

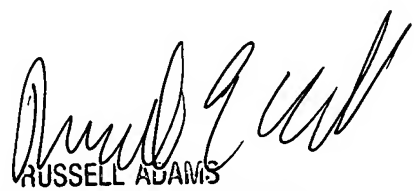
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russell Adams can be reached on (571) 272-2851. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

RB


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